

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellants	:	Van Vleet et al.	Conf. No.: 3210
Appl. No.	:	10/612,395	
Filed	:	July 2, 2003	
For	:	Server Architecture and Methods for Persistently Storing and Serving Event Data	
Examiner	:	Barbara Burgess	

APPEAL BRIEF

United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Appellants, Applicants in the above-captioned patent application, appeal the final rejection of Claims 1-13 and 46-55 set forth in the Final Office Action issued on March 26, 2007 (hereinafter “the Final Office Action”).

I. REAL PARTY IN INTEREST

The real party in interest in the present application is A9.com, Inc., the assignee of the present application.

II. RELATED PROCEEDINGS

No related appeals, interferences, or court proceedings are currently pending.

III. STATUS OF CLAIMS

Claims 1-13 and 46-55 are currently pending in the application and are the subject of this appeal. Claims 14-45 are canceled. The pending claims are listed as an appendix.

IV. STATUS OF AMENDMENTS

No amendments have been made to the present application in response to the Final Office Action.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The present application includes two independent claims. Each independent claim is summarized below, with citations to corresponding portions of the specification and drawings as required by 37 C.F.R. § 41.37(c)(1)(v). These citations illustrate specific examples and embodiments of the recited claim language, and are not intended to limit the claims.

Claim 1

Claim 1 is directed to a web site system (30), comprising:

- a web server system (39) that is responsive to requests from online users by generating and returning web pages, wherein the web server system (39) includes one or more applications (38) that generate personalized content for recognized users based on browse histories of such users (see, e.g., Fig. 1; ¶ 0022 on page 5; and page 7, last 3 lines of ¶ 26); and
- an event history server (32) that persistently stores event data descriptive of events that occur during browsing sessions of each of a plurality of users of the web server system (39), wherein the event history server (32) stores the event data substantially as corresponding events are reported to the event history server by the web server system (39), and makes such event data available in real time to the one or more applications (38) to facilitate personalization of web pages for the users (see, e.g., Fig. 1; ¶ 0005 on page 2; ¶ 0008 on page 3; ¶ 0021 beginning on page 4; ¶ 0023 beginning on page 5; and ¶¶ 0035-0040 beginning on page 9);
- wherein the event history server (32) implements a query interface through which the one or more applications (38) retrieve the event data associated with particular users at least by event type and event time of occurrence, and the web server system (39) uses the event data retrieved by the one or more applications (38) via said query interface to generate personalized web pages for transmission to users (see, e.g., last 7 lines of ¶ 0006 on page

2; ¶ 0009 on page 5; last 5 lines of ¶ 0024 on page 6; ¶ 0026 beginning on page 6; page 10, ¶ 0040, first 6 lines; ¶¶ 0041-0043 on page 11; and ¶¶ 0048-0049 on page 13).

Claim 55

Claim 55 is directed to a method performed by a web site system (30). The web site system includes a web server system (39) that is responsive to requests from users by generating and returning web pages, said web server system (39) including one or more applications (38) that generate personalized content for recognized users based on browse histories of such users. The method comprises at least the following:

- reporting event data from the web server system (39) to an event history server (32), said event data descriptive of events that occur during browsing sessions of each of a plurality of users of the web server system (see, e.g., Fig. 1; ¶ 0005 on page 2; and ¶ 0008 on page 3);
- storing the event data on the event history server (32) substantially as the corresponding events are reported to the event history server by the web server system, and making such event data available in real time to the one or more applications to facilitate personalization of web pages for the users (see, e.g., ¶ 0005 on page 2; ¶¶ 0008 and 0009 on page 3; and ¶¶ 0021-0023 beginning on page 4);
- with the one or more applications (38), retrieving, from the event history server (32), the event data associated with particular users, wherein the one or more applications (38) retrieve the event data at least by event type and event time of occurrence via a query interface of the event history server (see, e.g., ¶ 0006 on page 2; ¶¶ 0026-0027 beginning on page 6; and ¶ 0049 on page 13)
- with the web server system (39), using the event data retrieved by the one or more applications (38) via said query interface to generate personalized web pages for transmission to users (see, e.g., ¶ 0005 on page 2; ¶ 0009 on page 3; ¶ 0022 on page 5; ¶ 0027 on page 7; Fig. 3; ¶ 0056 on page 15; and ¶ 0081 on page 22).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The only ground for rejection to be reviewed on appeal is the rejection of Claims 1-13 and 46-55 under 35 U.S.C. § 103(a) as being unpatentable over Hentzel (U.S. Pat. 6,877,007) in view of Tamir (U.S. Pub. 2002/0063735). Appellants reserve the right to disqualify Hentzel as prior art in a subsequent proceeding.

VII. ARGUMENT

Appellants respectfully submit that the obviousness rejection of Claims 1-13 and 46-55 is improper at least because Hentzel and Tamir do not collectively teach or suggest all of the limitations of any claim. Each independent claim, and most of the dependent claims, are discussed separately below. By declining to separately argue in favor of some of the dependent claims, Appellants do not imply an agreement with, and do not acquiesce in, the positions taken in the Final Office Action with respect to such claims.

Independent Claim 1

Claim 1 reads as follows, with the primary limitations that are the subject of Appellants' arguments shown in bold:

A web site system, comprising:

a web server system that is responsive to requests from online users by generating and returning web pages, wherein **the web server system includes one or more applications that generate personalized content for recognized users based on browse histories of such users;** and

an event history server that persistently stores event data descriptive of events that occur during browsing sessions of each of a plurality of users of the web server system, wherein the event history server stores the event data substantially as corresponding events are **reported to the event history server by the web server system, and makes such event data available in real time to the one or more applications to facilitate personalization of web pages for the users;**

wherein the event history server implements a query interface through which the one or more applications retrieve the event data associated with particular users **at least by event type and event time of occurrence, and the web server system uses the event data retrieved**

by the one or more applications via said query interface to generate personalized web pages for transmission to users.

The rejection of Claim 1 is improper because, among other reasons, Hentzel and Tamir do not collectively teach or suggest the following limitations of the claim: (1) “the web server system includes one or more applications that generate personalized content for recognized users based on browse histories of such users,” (2) “the web server system uses the event data retrieved by the one or more applications ... to generate personalized web pages for transmission to users.”

In connection with these limitations, the Final Office Action appears to rely on Tamir’s use of “web display applications” to configure a user’s browser based on the user’s prior activity. Final Office Action at page 3, last line, to page 4, line 7. Nothing in Tamir, however, suggests that these web display applications are part of a “web server system” as claimed. Rather, the web display applications are client programs that are installed by users on their respective computers. See, e.g., paragraphs 0008, 0038 and 0113 and Figures 18-20 of Tamir. In addition, although Tamir’s web display applications may provide customized messaging and display configurations for users, they do not “generate personalized web pages for transmission to users” as claimed.

The rejection of Claim 1 is also improper because Hentzel and Tamir do not collectively teach or suggest an event history server that “implements *a query interface* through which the one or more applications retrieve the event data associated with particular users *at least by event type and event time of occurrence*” (emphasis added). In connection with this feature, the Final Office Action relies on Hentzel’s disclosure that the browsing sessions recorded by Hentzel’s tracking server 40 can be grouped according to location, length of session, and type of session, so that session records can more easily be retrieved for analysis. Final Office Action at page 3, lines 3-11, citing col. 8, lines 62-67, col. 9, lines 1 and 55-64, and col. 10, lines 8-22 of Hentzel. Nothing in the referenced portions of Hentzel, however, suggests that this feature of Hentzel involves a “query interface” as claimed. In addition, a session type as disclosed in Hentzel is not the same as an “event type” as claimed. In this regard, Claim 1 and Hentzel both distinguish between “events” and “sessions.” See Claim 1 (which recites “event data descriptive of events that occur during browsing sessions”), and col. 10, lines 36-41 of Hentzel.

Indeed, nothing in Hentzel suggests the ability to retrieve event data by event type using a query. Rather, the only disclosed method of retrieving the stored event data involves retrieving and playing back the events of a particular session. See Hentzel at col. 10, lines 8-41.

The rejection of Claim 1 is also improper because Hentzel and Tamir do not collectively teach or suggest an event history server that stores event data that is “reported to the event history server by the web server system.” In contrast, Hentzel and Tamir both disclose systems in which the browsing events are reported to the event tracking server by special client software that runs on the computers of the end users. In Hentzel, this special client software is referred to as a “tracking application,” and is sent to the user's computer with the requested web page. See Hentzel at col. 3, lines 44-59 (note that the requested web page is augmented with a special script that apparently causes the tracking application to be executed). In Tamir, the special client software is the “web display application” mentioned above. See paragraphs 0008, 0038 and 0113 and Figures 18-20 of Tamir. In both cases, the events are reported to the event tracking server by the computers of the end users, and not by the web server system.

In responding to Appellants’ arguments regarding this distinction, the Final Office Action treats Hentzel’s tracking server 40 as the “web server system” of Claim 1, and treats the associated recording database 80 (see Figure 1) as the “event history server.” Final Office Action at page 13, “Response to Arguments” section. This, however, is inconsistent with the position taken elsewhere in the Final Office Action that Hentzel’s tracking server 40 represents the “event history server” of Claim 1. See Final Office Action at, e.g., page 3, line 3. Indeed, Hentzel’s recording database 80 cannot properly serve as the “event history server” of Claim 1 because, for example, it does not implement “a query interface through which the one or more applications retrieve the event data” as claimed.

For at least these reasons, the rejection of Claim 1 is improper and should be reversed.

Claim 2

The rejection of Claim 2 is improper in view of its dependency from independent Claim 1. In addition, the rejection of Claim 2 is improper because Hentzel and Tamir do not collectively teach or suggest the following limitations added by Claim 2: “the event history server records the event data for a given event as an event object that includes at least the following: an event type identifier, an event value, a user ID, and a time stamp.” Nothing in Hentzel suggests that these

elements of data are stored for a given event. The portions of Tamir (paragraphs 0052-0057) referenced in Final Office Action refer primarily to the storage of data at the session level, and not at the event level.

Claim 3

The rejection of Claim 3 is improper in view of its dependency from independent Claim 1. In addition, the rejection of Claim 3 is improper because Hentzel and Tamir do not collectively teach or suggest the following limitations added by Claim 3: “the event history server includes at least one storage layer server that stores the event data persistently by user ID, and further includes at least one cache layer server that caches event data of online users.” Appellants respectfully disagree with the assertion that this feature is taught by paragraphs 36 and 59-62 of Tamir. See Final Office Action at page 5, last full paragraph. Indeed, Tamir does not even mention the caching of event data.

Claim 5

The rejection of Claim 5 is improper in view of its dependency from independent Claim 1. In addition, the rejection of Claim 5 is improper because Hentzel and Tamir do not collectively teach or suggest the following limitations added by Claim 5: “the event history server comprises a plurality of cache layer servers, each of which is assigned to a different respective set of browse session IDs such that a given user remains assigned to a particular cache layer server throughout a browse session.” The referenced portions of Tamir—namely paragraphs 0052 and 0053—simply do not disclose this feature. Indeed, neither Hentzel nor Tamir discloses an event history server that includes cache layer servers.

Claim 7

The rejection of Claim 7 is improper in view of its dependency from independent Claim 1. In addition, the rejection of Claim 7 is improper because Hentzel and Tamir do not collectively teach or suggest the following limitations added by Claim 7: “the query interface of the event history server supports queries of the form ‘has User X accessed URL Y?’” In connection with this feature, the Final Office Action points to Tamir’s teaching, at paragraphs 0067-0070, of an Application Information Record that includes a Client Query Time Interval Field. Nothing in Tamir, however, suggests that this Client Query Time Interval Field is or can be used to support

the type of query recited in Claim 7. Indeed, neither Tamir nor Hentzel teach an event history server capable of handling this type of query.

Claim 8

The rejection of Claim 8 is improper in view of its dependency from independent Claim 1. In addition, the rejection of Claim 8 is improper because Hentzel and Tamir do not collectively teach or suggest the following limitations added by Claim 8: “the query interface of the event history server supports queries of the form ‘when has User X accessed URL Y?’” In connection with this feature, the Final Office Action again points to Tamir’s teaching of an Application Information Record that includes a Client Query Time Interval Field. Nothing in Tamir, however, suggests that Tamir’s Client Query Time Interval Field is or can be used to support the type of query recited in Claim 8. Indeed, neither Tamir nor Hentzel teach an event history server that supports this type of query.

Claim 9

The rejection of Claim 9 is improper in view of its dependency from independent Claim 1. In addition, the rejection of Claim 9 is improper because Hentzel and Tamir do not collectively teach or suggest the following limitations added by Claim 9: “the event history server records event data for substantially every mouse click action of every recognized user of a corresponding web site.” In connection with this feature, the Final Office Action points to col. 8, lines 48-60 of Hentzel. Hentzel’s system, however, is apparently only capable of tracking the events of users whose browsers are capable of executing Hentzel’s embedded script. See Hentzel at col. 3, lines 44-65. Thus, the system presumably cannot record the event data “for every recognized user” as claimed. The referenced portion of Hentzel does not suggest otherwise.

Claim 10

The rejection of Claim 10 is improper in view of its dependency from independent Claim 1. In addition, the rejection of Claim 10 is improper because Hentzel and Tamir do not collectively teach or suggest the following limitations added by Claim 10: “the event history server records impression event data indicative of specific items presented to users on dynamically generated web pages.” Nothing in the referenced portion of Hentzel (col. 3, lines 60-65) suggests either that the web pages at issue are “dynamically generated,” or that the tracking server records impression event data indicative of specific items presented to users on such pages.

Claim 11

The rejection of Claim 11 is improper in view of its dependency from independent Claim 1. In addition, the rejection of Claim 11 is improper because Hentzel and Tamir do not collectively teach or suggest the following limitations added by Claim 11: “the at least one application includes a web search application that provides functionality for searching an index of web pages, and uses the event history server to identify and highlight web search result items that have previously been accessed by a user conducting a current search.” The referenced portion of Hentzel (col. 9, lines 22-40) does not disclose a web search application, much less a web search application that “uses the event history server to identify and highlight web search result items that have previously been accessed by a user” as claimed.

Claim 12

The rejection of Claim 12 is improper in view of its dependency from independent Claim 1. In addition, the rejection of Claim 12 is improper because Hentzel and Tamir do not collectively teach or suggest the following limitations added by Claim 12: “the at least one application includes an application that provides functionality for users to interactively view and organize their respective browse history data as recorded by the event history server.” The referenced portion of Hentzel, col. 9, lines 10-15, says nothing to suggest the ability of users to interactively view and organize their respective browse history data.

Claim 13

The rejection of Claim 13 is improper in view of its dependency from independent Claim 1. In addition, the rejection of Claim 13 is improper because Hentzel and Tamir do not collectively teach or suggest the following limitations added by Claim 13: “the event history server generates user-specific Bloom filters reflective of event histories of specific users, and uses the user-specific Bloom filters to respond to queries from the at least one application.” The referenced portion of Tamir (paragraphs 0067-0070) makes no mention of Bloom filters, and appears to be completely unrelated to the feature of Claim 13.

Claim 46

The rejection of Claim 46 is improper in view of its dependency from independent Claim 1. In addition, the rejection of Claim 46 is improper because Hentzel and Tamir do not collectively teach or suggest the following limitations added by Claim 46: “the web server system

is responsive to a page request from a user during a browsing session by retrieving, from the event history server, event data descriptive of at least one event that has already occurred during the browsing session, and by using the event data descriptive of said at least one event to provide personalized content to the user.” The referenced portion of Hentzel (col. 8, lines 45-60) merely describes the process of recording user sessions, and says nothing about how the recorded event data is subsequently used. Indeed, nothing in Hentzel suggests that the recorded event data for an event that occurs during a browsing session can be used during the same browsing session to provide personalized content to the user. To the contrary, Hentzel appears to use the recorded session data only after the session is complete.

Claim 48

The rejection of Claim 48 is improper in view of its dependency from independent Claim 1. In addition, the rejection of Claim 48 is improper because Hentzel and Tamir do not collectively teach or suggest the following limitations added by Claim 48: “the query interface includes functionality for the one or more applications to additionally retrieve the event data based on types of user-selectable display elements associated with the events.” Appellants respectfully disagree that this feature is implicit in Hentzel’s disclosure of the ability to group recorded sessions according to location, date, length of session, and type of session.

Claim 49

The rejection of Claim 49 is improper in view of its dependency from independent Claim 1. In addition, the rejection of Claim 49 is improper because Hentzel and Tamir do not collectively teach or suggest the following limitations added by Claim 49: “the event history server stores separate event objects for each of a plurality of respective events that occur during a user’s browsing session, each event object being a separately retrievable entity that is retrievable via the query interface.” The Final Office Action points to Hentzel in connection with this claim. Hentzel, however, only refers to the retrieval of entire session records, and not to the retrieval of event objects as claimed. See, e.g., col. 10, lines 8-41 of Hentzel. The referenced portion of Hentzel, col. 8, lines 48-65, says nothing to suggest the use of event objects that are separately retrievable via a query interface as claimed.

Claim 51

The rejection of Claim 51 is improper in view of its dependency from independent Claim 1. In addition, the rejection of Claim 51 is improper because Hentzel and Tamir do not collectively teach or suggest the following limitations added by Claim 51: “the web server system comprises an event reporting component that runs on a web server machine and reports the events to the event history server over a network, said web server machine being separate from machines on which the one or more applications run.” The portion of Hentzel referenced in the Final Office Action, namely col. 10, lines 10-23, relates to the retrieval of session records from the tracking server, and says nothing to suggest an event reporting component capable of operating as recited in Claim 51.

Claim 54

The rejection of Claim 54 is improper in view of its dependency from independent Claim 1. In addition, the rejection of Claim 54 is improper because Hentzel and Tamir do not collectively teach or suggest the following limitations added by Claim 54: “the event history server is capable of executing a query of the following form, where N, T and Y are variable parameters: ‘recall last N events of type T for user Y.’” The portion of Hentzel referenced in the Final Office Action (col. 8, lines 62-67) says nothing to suggest this feature. Indeed, nothing in Hentzel suggests the ability to recall events in any manner other than by retrieving an entire session record.

Independent Claim 55

Claim 55 reads as follows, with the limitations that are the subject of Appellants’ arguments shown in bold:

A method performed by a web site system, said web site system including a web server system that is responsive to requests from users by generating and returning web pages, **said web server system including one or more applications that generate personalized content for recognized users based on browse histories of such users**, the method comprising:

reporting event data from the web server system to an event history server, said event data descriptive of events that occur during browsing sessions of each of a plurality of users of the web server system;

storing the event data on the event history server substantially as the corresponding events are reported to the event history server **by the**

web server system, and making such event data available in real time to the one or more applications to facilitate personalization of web pages for the users;

with the one or more applications, retrieving, from the event history server, the event data associated with particular users, wherein the one or more applications **retrieve the event data at least by event type and event time of occurrence via a query interface of the event history server**; and

with the web server system, using the event data retrieved by the one or more applications via said query interface to generate personalized web pages for transmission to users.

The rejection of Claim 55 is improper because, among other reasons, Hentzel and Tamir do not collectively teach or suggest either of the following: (1) “with the one or more applications, retrieving, from the event history server, the event data associated with particular users,” or (2) “with the web server system, using the event data retrieved by the one or more applications ... to generate personalized web pages for transmission to users.” The Final Office Action appears to rely on Tamir’s use of “web display applications” in connection with these limitations. Final Office Action at page 3, last line, to page 4, line 7. As discussed above, however, these web display applications are not part of a “web server system” as claimed. Rather, they are client programs that are installed by users on their respective computers. See, e.g., paragraphs 0008, 0038 and 0113 and Figures 18-20 of Tamir. In addition, nothing in Tamir suggests that these web display applications “generate personalized web pages for transmission to users” as claimed.

The rejection of Claim 55 is also improper because Hentzel and Tamir do not collectively teach or suggest that the one or more applications “retrieve the event data at least by event type and event time of occurrence via a query interface of the event history server.” As discussed above in connection with Claim 1, the referenced portions of Hentzel do not suggest the use of a query interface, much less a query interface through which event data can be retrieved “by event type.” In this regard, the manual retrieval of a recorded session of a particular type, as disclosed in Hentzel, does not suggest or inherently involve the use of a query interface to retrieve event data by event type.

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The rejection of Claim 55 is also improper because Hentzel and Tamir do not collectively teach or suggest “reporting event data from the web server system to an event history server.” In contrast, in both Hentzel and Tamir, the event data is reported to the event history server by the user computers via special software executed on such computers. See Hentzel at col. 3, lines 44-59, and Tamir at paragraphs 0008, 0038 and 0113 and Figures 18-20.

For at least these reasons, the rejection of Claim 55 is improper and should be reversed.

VIII. CONCLUSION

For the reasons explained above, Appellants respectfully submit that the rejections of Claims 1-13 and 46-55 are improper and should be reversed.

Please charge any additional fees that may be required now or in the future to Deposit Account No. 11-1410.

Respectfully submitted,

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Dated: August 10, 2007

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CLAIMS APPENDIX

1. A web site system, comprising:

a web server system that is responsive to requests from online users by generating and returning web pages, wherein the web server system includes one or more applications that generate personalized content for recognized users based on browse histories of such users; and

an event history server that persistently stores event data descriptive of events that occur during browsing sessions of each of a plurality of users of the web server system, wherein the event history server stores the event data substantially as corresponding events are reported to the event history server by the web server system, and makes such event data available in real time to the one or more applications to facilitate personalization of web pages for the users;

wherein the event history server implements a query interface through which the one or more applications retrieve the event data associated with particular users at least by event type and event time of occurrence, and the web server system uses the event data retrieved by the one or more applications via said query interface to generate personalized web pages for transmission to users.

2. The web site system of Claim 1, wherein the event history server records the event data for a given event as an event object that includes at least the following: an event type identifier, an event value, a user ID, and a time stamp.

3. The web site system of Claim 1, wherein the event history server includes at least one storage layer server that stores the event data persistently by user ID, and further includes at least one cache layer server that caches event data of online users.

4. The web site system of Claim 2, wherein the cache layer server is configured to collect event data of an unrecognized user during a browsing session, and to pass such collected event data to the at least one storage layer server for persistent storage thereof if the unrecognized user becomes recognized during the browsing session.

5. The web site system of Claim 1, wherein the event history server comprises a plurality of cache layer servers, each of which is assigned to a different respective set of browse

session IDs such that a given user remains assigned to a particular cache layer server throughout a browse session.

6. The web site system of Claim 1, wherein the event history server comprises a plurality of mirrored storage layer servers that persistently store like event data by user ID.

7. The web site system of Claim 1, wherein the query interface of the event history server supports queries of the form “has User X accessed URL Y?”

8. The web site system of Claim 1, wherein the query interface of the event history server supports queries of the form “when has User X accessed URL Y?”

9. The web site system of Claim 1, wherein the event history server records event data for substantially every mouse click action of every recognized user of a corresponding web site.

10. The web site system of Claim 1, wherein the event history server records impression event data indicative of specific items presented to users on dynamically generated web pages.

11. The web site system of Claim 1, wherein the at least one application includes a web search application that provides functionality for searching an index of web pages, and uses the event history server to identify and highlight web search result items that have previously been accessed by a user conducting a current search.

12. The web site system of Claim 1, wherein the at least one application includes an application that provides functionality for users to interactively view and organize their respective browse history data as recorded by the event history server.

13. The web site system of Claim 1, wherein the event history server generates user-specific Bloom filters reflective of event histories of specific users, and uses the user-specific Bloom filters to respond to queries from the at least one application.

14-45: (Canceled)

46. The web site system of Claim 1, wherein the web server system is responsive to a page request from a user during a browsing session by retrieving, from the event history server, event data descriptive of at least one event that has already occurred during the browsing session, and by using the event data descriptive of said at least one event to provide personalized content to the user.

47. The web site system of Claim 1, wherein the web server system reports the events directly to the event history server without use of a web log.

48. The web site system of Claim 1, wherein the query interface includes functionality for the one or more applications to additionally retrieve the event data based on types of user-selectable display elements associated with the events.

49. The web site system of Claim 1, wherein the event history server stores separate event objects for each of a plurality of respective events that occur during a user's browsing session, each event object being a separately retrievable entity that is retrievable via the query interface.

50. The web site system of Claim 49, wherein each event object includes an event type identifier indicating a type of an associated event.

51. The web site system of Claim 1, wherein the web server system comprises an event reporting component that runs on a web server machine and reports the events to the event history server over a network, said web server machine being separate from machines on which the one or more applications run.

52. The web site system of Claim 1, wherein the event history server stores the event data substantially as corresponding events occur.

53. The web site system of Claim 1, wherein the event history server additionally stores event data descriptive of events reported to the event history server by event reporting software that runs on user computers.

54. The web site system of Claim 1, wherein the event history server is capable of executing a query of the following form, where N, T and Y are variable parameters: "recall last N events of type T for user Y."

55. A method performed by a web site system, said web site system including a web server system that is responsive to requests from users by generating and returning web pages, said web server system including one or more applications that generate personalized content for recognized users based on browse histories of such users, the method comprising:

reporting event data from the web server system to an event history server, said event data descriptive of events that occur during browsing sessions of each of a plurality of users of the web server system;

storing the event data on the event history server substantially as the corresponding events are reported to the event history server by the web server system, and making such event data available in real time to the one or more applications to facilitate personalization of web pages for the users;

with the one or more applications, retrieving, from the event history server, the event data associated with particular users, wherein the one or more applications retrieve the event data at least by event type and event time of occurrence via a query interface of the event history server; and

with the web server system, using the event data retrieved by the one or more applications via said query interface to generate personalized web pages for transmission to users.

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EVIDENCE APPENDIX

None

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RELATED PROCEEDINGS APPENDIX

None